

ORIGINAL

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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Federal Communications Commission  
Office of Secretary

In the Matter of )  
 )  
Advanced Television Systems )  
and Their Impact upon the ) MM Docket No. 87-268  
Existing Television Broadcast )  
Service )  
 )

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To: The Commission

**PETITION FOR RECONSIDERATION**

Blade Communications, Inc., ("Blade") licensee of four television stations located throughout the United States, by its counsel and pursuant to 47 C.F.R. § 1.429(a) (1996), hereby petitions the Commission to reconsider several aspects of its *Fifth Report and Order* and *Sixth Report and Order*, in the above-captioned proceeding.<sup>1/</sup> Blade wholly supports the Commission's movement toward full implementation of digital television ("DTV") and applauds the Commission's efforts to bring this new television service to the American public. Nonetheless, there are several elements of the Commission's DTV rules that require reconsideration if DTV is to become a true success for broadcasters and television viewers.

Blade is the licensee of the following four full-power television stations:

WDRB(TV), Louisville, Kentucky  
KTRV(TV), Nampa, Idaho  
WLIO(TV), Lima, Ohio  
WLFI(TV), Lafayette, Indiana

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<sup>1/</sup> *Fifth Report and Order*, MM Docket No. 87-268, FCC 97-116 (rel. Apr. 21, 1997) ("*Fifth R&O*"); *Sixth Report and Order*, MM Docket No. 87-268, FCC 97-116 (rel. Apr. 21, 1997) ("*Sixth R&O*") (collectively, the "*R&Os*").

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Blade recognizes that there is great variation in the location, terrain, facilities and coverage of these stations. Given the wide range of issues which affect each station, the Commission's table of allotments could not result in an optimal DTV allotment for each of Blade's stations.

Nevertheless, the Commission's DTV Table exposes two interrelated issues that may jeopardize the ability of Blade's stations to provide full-scale digital television broadcasts to its viewers.

The DTV Table of Allotments is based on the overarching goal of replicating existing service.<sup>2/</sup> However, the power levels and channels assigned by the Commission to Blade's DTV allotments will render this goal of replication an impossibility. The inability to replicate service areas, when combined with extreme power disparities between DTV allotments in particular Blade television markets, will immediately, and perhaps perpetually, place these stations at a competitive disadvantage in the digital era.

To resolve these problems, Blade proposes two solutions. First, the Commission should delay final issuance of the DTV table of allotments for a 90-day period following the issuance of *OET Bulletin No. 69*, the critical technical document that will provide needed guidance in resolving interference and other engineering issues. Second, Blade suggests that stations should be permitted to increase to maximize power now as provided for in the *Sixth R & O* at this time, rather than in individual modification applications. Similarly, the Commission should permit stations to increase their power, even if interference is caused, upon a showing by the station that the interference can be avoided through directional antennas, moving transmitter sites or other engineering solutions.

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<sup>2/</sup> *Sixth R&O* at ¶28.

**I. THE COMMISSION SHOULD AFFORD PARTIES A FURTHER OPPORTUNITY TO COMMENT ON THE DTV TABLE AFTER ITS METHODOLOGY IS MADE AVAILABLE.**

Service replication is the bedrock of the Commission's DTV table of allotments. In devising the allotment table for over 1,200 full power television stations, the Commission attempted to ensure that a television station's DTV assignment would replicate the station's current NTSC coverage areas and populations. Indeed, in the *Sixth R&O*, the Commission specifically emphasized:

We believe that providing DTV allotments that replicate the service areas of existing stations offers important benefits for both viewers and broadcasters. This approach will ensure that broadcasters have the ability to reach audiences that they now serve and that viewers have access to the stations that they can now receive over-the-air.<sup>3/</sup>

Despite the best of intentions, the Commission's DTV assignments and power levels for Blade's stations do not accomplish this. Although the negative impact on such stations will be significant, the impact on viewers will be even greater. Viewers simply will not be able to receive certain of the television signals they have been accustomed to receiving for decades.

In order to evaluate whether the DTV Table implements the Commission's objectives in specific instances, interested parties must be able to calculate the interference that is likely to result and determine the service areas of new DTV stations in accordance with the Commission's methodology (Longley-Rice). As demonstrated by the attached technical report ("Attachment A"), Blade has not been provided the means to evaluate in a meaningful fashion whether service replication has indeed been achieved. But the critical piece of information necessary for stations to evaluate contours—*OET Bulletin No. 69*—has not been timely released though the *R&Os*

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<sup>3/</sup> *Sixth R&O* at ¶29.

refer to it on several occasions. Without *OET Bulletin No. 69*, it is impossible, for example, for stations to know precisely what operation parameters for the Longley-Rice methodology apply or what amount of interference is considered *de minimis*.<sup>4/</sup> In turn, it is impossible for stations to know how to assess the reasonableness of either their own DTV allotment or those of nearby licensees. Moreover, broadcasters are ill equipped to verify whether the DTV Table meets *any* standard of adequacy, much less whether it is *optimized* as the Commission contends.<sup>5/</sup>

Therefore, before the rules and the DTV Table become final—but *after* the Commission’s methodology is made available—the Commission should give interested parties a further opportunity to comment on the Table and the methodology. A brief additional comment period of 90 days will not significantly delay implementation of the transition to DTV. Indeed, to the extent that there are problems with the DTV Table, the Commission can fix those problems more efficiently and expeditiously if they are identified in a further round of comments while this proceeding remains open, than if they are identified in a plethora of separate petitions for rule making after the DTV Table becomes final.

## **II. TO OBTAIN REPLICATION, THE COMMISSION SHOULD ALLOW STATIONS SUCH AS WLIO(TV) TO MAXIMIZE FACILITIES NOW.**

The service replication problem inherent in the DTV table of allotments is exemplified by Blade’s station in Lima, Ohio. In that market Blade owns WLIO(TV), an NBC affiliate that

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<sup>4/</sup> Attachment A provides examples of specific information that stations need to evaluate contours accurately.

<sup>5/</sup> As a matter of administrative law, the Commission must, of course, set forth the basis and underlying support for its rules in a manner that is sufficiently detailed to permit judicial review. *See, e.g., National Nutritional Foods Association v. Weinberger*, 512 F.2d 688, 701 (2d. Cir. 1975), *cert. denied*, 423 U.S. 827 (1975).

operates at 661 kW on NTSC Channel 35. Viewers have been watching WLIO(TV) since 1953. WLIO(TV) has been assigned DTV channel 20 at a power of only 50 kW. In evaluating this allotment Blade has been unable to demonstrate that replication at such a low power will be possible and it believes that the station's digital signal will be fragile in most reception points outside of the present NTSC Grade A coverage. To correct this problem Blade desires to increase its DTV operating power. It's proposal is detailed in Attachment A.

While Blade is acutely aware of solutions to its most damaging DTV obstacles, those solutions, at present, are unavailable. The most feasible solution is an immediate power increase. In the *Sixth R&O* the Commission stressed that

stations should be able to maximize their facilities provided that no new interference is caused to other stations. We therefore will permit stations to request an increase in their operating power and/or height of antenna from that specified in the DTV Table, up to the maximum permissible limits on DTV power and antenna height set forth below or up to that needed to provide the same geographic coverage as the largest station within their market.<sup>6/</sup>

Principles of fundamental fairness, dictate that the Commission should permit Blade to request its power upgrade now, during this reconsideration proceeding. The Commission's proposed upgrade process would create and perpetuate a nation of entrenched DTV stations with high power and broad coverage fighting to prevent less powerful stations from obtaining the necessary engineering tools to remain competitive. Each Blade station and each of the hundreds of other stations wishing to fight this entrenched system would be forced to file an individual modification application. The Commission would be compelled to continually evaluate hundreds of these applications, many of which would conflict with one another. Additional

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<sup>6/</sup> *Sixth R&O* at ¶31.

procedures to resolve conflicts would need to be developed and scarce administrative resources would be wasted as the Commission continually addressed the “ripple” effect caused by each modification. Furthermore, because each application is dependent on a showing that no interference increase would occur or that affected stations had agreed to the modification, incumbently powerful stations would have a strong incentive to make every proposed power modification hotly contested. Unhappy applicants also could pose the continual specter of lengthy appeals under *Melody Music*<sup>7/</sup> and related Commission precedents requiring common treatment of similarly situated parties.

Rather than endure this costly and time-consuming procedure—to both the Commission and private parties—the Commission should conserve its administrative resources and permit Blade and other broadcasters to request their power upgrades during this reconsideration proceeding. Acting now would produce the primary benefit of providing the Commission with a more detailed understanding of the ultimate DTV landscape with most stations at their peak coverage and power. More importantly, the transition period would be stripped of fairness questions and would allow the Commission and licensees to focus on addressing the real and potentially thorny engineering issues certain to arise in implementing a nationwide change in the manner of delivering free television signals.

Permitting power increases now would not delay the DTV transition either. Blade and numerous other broadcasters already have commissioned engineering studies that demonstrate the feasibility of huge power increases free of harmful interference. Of course, not every station

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<sup>7/</sup> *Melody Music, Inc. v. FCC*, 345 F.2d 730 (D.C. Cir. 1965) (similarly situated parties should be treated in the same manner by the Commission).

has the technical information at its fingertips to determine what shortcomings or solutions exist for its DTV allotment. Moreover, incomplete information regarding Commission criteria and procedures will hamper stations from making an evaluation whether maximizing facilities is required. The Commission, however, need not leave these stations without a remedy. Rather, as described in the prior section, the Commission should designate the current DTV Table of Allotments as an “interim table” and allow parties additional time to bring engineering solutions to the Commission (along with the aforementioned facilities requests).

Furthermore, if the Commission’s replication goals cannot be achieved in place to place, the Commission should clearly indicate what relief such stations can expect. The Commission has recognized the importance of replication throughout this rule making. *Melody Music* necessitates that if the Commission can provide replication for some parties but not others, some means of remedy (e.g., reduction of fees, compensation, preferences, etc.) must be provided to broadcasters unable to replicate their NTSC coverage.

### **III. THE COMMISSION SHOULD CLARIFY VARIOUS UNCERTAINTIES SURROUNDING DTV IMPLEMENTATION.**

Blade supports the position of NAB and other broadcasters urging that the Commission clarify that local zoning jurisdictions are preempted by regulations that require conversion to DTV. In the alternative, the Commission should promptly issue a notice for proposed rule making regarding preemption of zoning regulations and adopt the NAB position. Such steps are necessary to ensure that local zoning issues do not impede the prompt construction of towers needed for new DTV facilities.

As described in Attachment A, the Commission also should clarify uncertainties regarding RF radiation compliance, the scarcity of microwave frequencies for transmissions to

and from the broadcast tower and treatment of closed-captioning and EAS-weather bulletins.

While the Commission will allow broadcasters to revert to their original NTSC channel with DTV transmissions after the recovery date,<sup>8/</sup> no procedures have been established regarding such a proposition. Blade supports this concept, but urges the Commission to clarify that preferences be given to those parties whose paired DTV channel is outside of the core spectrum and also establish a schedule of priority for proposed mutually exclusive reversions and other similar potential conflicts.

Moreover, the Commission should clarify procedures regarding establishing voluntary coordination committees. Blade approves of the fact that the Commission blessed such efforts, but notes that little guidance was provided in determining what committees would have credibility with the Commission or how this concept might be implemented (other than that low power stations and the public must participate).<sup>9/</sup> In the face of the rapid DTV roll-out, the Commission should facilitate coordination efforts by establishing clearer guidelines. In doing so, Blade urges the Commission to consider the effect of “private parties” that may control coordination committee efforts.

Lastly, the Commission should recognize the competitive disparity between analog VHF stations paired with a UHF-DTV channel and analog UHF stations paired with a UHF-DTV channel. As a result of the Commission’s replication policy, the VHF/UHF stations receive robust allotments of digital power, while UHF/UHF stations receive power levels of only a small fraction. Given the commitment to a rapid DTV roll-out, the Commission should either abandon

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<sup>8/</sup> *Sixth R&O* at ¶84.

<sup>9/</sup> *See, Sixth R&O* at ¶182.



this replication artifact or provide means of mitigating the fact that UHF/UHF stations will be burdened with a disproportionate risk associated with the broadcasters transition to DTV.

### **CONCLUSION**

The Commission's DTV Table of Allotments does not satisfy the Commission's primary transition goal—total service replication. Hampered by lower power, stations such as Blade's WLIO(TV) are consigned to begin the DTV era at a significant competitive and technical handicap. The Commission should attempt to rectify these problems now, by affording parties an extra 90 days to comment on the DTV table of allotments and by allowing parties to seek power maximization now. The Commission also should address numerous subsidiary issues that will affect the DTV transition and spectrum recovery.

The success of DTV is not foreordained simply because technology permits digital transmission. Only a transition that treats all parties, including consumers, fairly and with the same limitations can ensure that DTV succeeds. The Commission should not bind itself to a table that perpetuates inequities and simply for the sake of expediency.

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Respectfully submitted,

BLADE COMMUNICATIONS, INC.

By: 

John R. Feore, Jr.

H. Anthony Lehv

Scott S. Patrick

Its Attorneys

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202-776-2000

Dated: June 13, 1997

## **ATTACHMENT A**

### **Technical Report**

ENGINEERING STATEMENT  
IN SUPPORT OF  
PETITION FOR RECONSIDERATION  
MM DOCKET 87-268  
ON BEHALF OF  
**BLADE COMMUNICATIONS INC.**

JUNE 1997

COHEN, DIPPELL AND EVERIST, P.C.  
CONSULTING ENGINEERS  
RADIO AND TELEVISION  
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington     )  
                                  ) ss  
District of Columbia )


Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

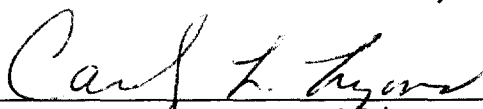
That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

  
\_\_\_\_\_  
Donald G. Everist  
District of Columbia  
Professional Engineer  
Registration No. 5714

Subscribed and sworn to before me this 12<sup>th</sup> day of June,  
1997.

  
\_\_\_\_\_  
Notary Public  
My Commission Expires: 2/28/98

This engineering statement has been prepared on behalf of Blade Communications, Inc. ("Blade"), licensee of Stations WDRB-TV, Louisville, Kentucky; KTRV-TV, Nampa, Idaho; WLIO-TV, Lima, Ohio and WLFI-TV, Lafayette, Indiana. This statement is in support of a Petition for Reconsideration for the Sixth Report and Order, MM Docket No. 87-268<sup>1</sup> ("Report and Order").

Blade has authorized this firm to conduct studies and review the various aspects of the Report and Order to the extent possible as it applies to the Blade stations. These studies were conducted on the impact of the Report and Order on their current NTSC service area and the interference which could result to existing service by new digital operations and the service replication by the assigned digital television ("DTV") operation for each station.

Blade stations operate with the following NTSC facilities and were assigned the companion DTV facilities.

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<sup>1</sup>MM Docket No. 87-268, "In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service," adopted April 3, 1997.

<u>Station</u>	<u>NTSC</u>			<u>DTV</u>		
	<u>Channel</u>	<u>ERP</u> <u>kW</u>	<u>HAAT</u> <u>Meters</u>	<u>Channel</u>	<u>ERP</u> <u>kW</u>	<u>HAAT</u> <u>Meters</u>
WDRB-TV	41	5000	391	49	237.2	391
KTRV-TV*	12	200	802	27	358.1	829
WLIO-TV	35	661	165	20	50	165
WLFI-TV	18	1480	238	11	3.2	238

\*Application on file to change site.

This engineering statement addresses those technical aspects of the Report and Order which are found to be of critical importance to the Blade stations.

### **PRE-TRANSITION ISSUES**

#### **History**

To provide some insight to the Commission regarding the effort that can be required to improve the facilities of a station, Blade provides the following regarding its latest completed improvement project. This discussion is provided to give insight on some of the steps required in order to bring a new or improved facility on the air.

This process began when Blade authorized this firm to conduct a series of technical studies for WDRB regarding improvement in coverage. Based on these studies, WDRB-TV made application and received authority to increase power to 5000 kW horizontal (non-

directional) and 1200 kW vertical (directional)<sup>2</sup>. Tower studies were commissioned and the tower was strengthened. Zoning approval was requested for the new transmitter building. WDRB-TV selected an antenna manufacturer to replicate the desired antenna patterns. After the transmitting antenna was built, WDRB-TV then commissioned a series of exhaustive antenna measurements at a far field test range. This required shipping the 55.2 foot long antenna weighing 4 tons by special truck. Elevation patterns and antenna patterns were measured for both the horizontal and vertical planes at a far-field test range. After these test were completed, the antenna was installed. After the installation of the new antenna and operation of the new facilities commenced with increased power, this firm was authorized to perform extensive field measurements with a special custom designed vehicle. These measurements were performed at a height of 9.1 meters with the data taken for a minimum horizontal distance of 30 meters. These measurements extended out to and beyond the predicted WDRB-TV Grade B contour. These measurements were analyzed and a report written documenting the measurement project and station coverage. This level of effort can only be performed over a protracted period of time and at considerable expense. Implementing DTV should involve a similar effort. Obviously, an

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<sup>2</sup>The Commission in the Report and Order has not indicated if vertical polarization will be permitted and whether data stream disturbance due to multipath is a critical factor.



abbreviated Commission mandated schedule will hinder Blade from taking similar steps to properly bring the DTV operation on the air.

The Report and Order does not provide guidance about how field measurements are to be performed for DTV. Blade urges the Commission to adopt specific rules so that meaningful data can be gathered. Without proper field measurement procedure the ability to compare results with the HDTV model cannot be made. Blade urges the Commission to adopt rules regarding DTV signal level measurement procedures.

### **COVERAGE AND INTERFERENCE ASSESSMENT**

A study of the Blade stations' existing NTSC and proposed service areas has been performed by the National Telecommunications and Information Administration Institute for Telecommunication Sciences ("ITS") computer using the Communication System Performance Model--Point to Point Irregular Terrain HDTV Model ("HDTV model"). The HDTV model uses the Longley-Rice propagation methodology and evaluates in grid cell size 0.75-1.5 km with 3-second terrain data intervals between every 90 meters to 100 meters at one degree intervals. This HDTV model was selected since it is believed it generally replicates the Commission's DTV assignment model. An ITS representative indicates that the HDTV model follows the Commission's decisions in the Report and Order.

The Report and Order provides the decisions made by the Federal Communications Commission ("Commission") regarding DTV allotments, procedures for assigning DTV frequencies and plans for spectrum recovery; however, crucial information is not provided in which to make informed evaluations and therefore judgements cannot be made. Specifically, the Commission indicates in the Section 73.622 of the FCC Rules<sup>3</sup> that OET Bulletin 69 furnishes detailed information on service computational methodology. Also, the Commission indicates in Section 73.623 that OET Bulletin 69 will provide guidance on interference computation.<sup>4</sup> This report has not been made available to the industry and therefore an independent accurate evaluation of each of the Blade stations cannot be performed for either service or interference considerations. Such issues as whether interference protection to existing NTSC service by DTV operations, whether protection to existing translators or cable headends or whether NTSC service replication by the proposed DTV facility as rendered cannot be accurately performed. Without this technical information, these very necessary basic evaluations cannot be made or estimated. Incomplete information regarding Commission criteria and procedures will hamper Blade from making an evaluation whether an increase in power is required. For example, WLIO

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<sup>3</sup>See E-29, MM Docket No. 87-268, Sixth Report and Order, Adopted April 3, 1997; Released April 21, 1997.

<sup>4</sup>For example, application of the dipole factor needs to be fully understood.

serves many viewers in distant counties through over-the-air reception, and reception by cable television companies in Ohio and Indiana. WLIO has concern that viewers in these Grade B, or fringe areas, will not be permitted to continue to view WLIO.

WLIO in 1993 sought a modification of station ADI for the Counties of Auglaize, Hancock, Hardin, Mercer, Putnam, and Van Wert, in Ohio. This was granted to WLIO by the Commission in a Memorandum and Order, based upon the viewers in those counties.

WLFI has similar concerns. For example, it notes that the Commission just granted an LPTV modification (BPTVL-960515IC) in a nearby suburban area. The LPTV is to operate on a co-channel frequency to the assigned WLFI DTV frequency.

Blade will, if necessary, make application for maximum DTV facilities for all the Blade stations.

### **OTHER ISSUES**

Uncertainties exist with the implementation of DTV regarding what procedures are to be used to demonstrate radio frequency field level compliance. Also Commission guidance is requested on how microwave frequency issues to and from the transmitter are to be addressed when there are insufficient number of available frequencies. Blade also requests Commission guidance on how closed captioning and EAS-weather bulletins are

to be incorporated into the DTV operation. Blade strongly urges the Commission to preempt local zoning jurisdictions relating to DTV implementation. Furthermore, Blade does not favor regional industry coordinating committees, except for a very limited and narrow technical role.

### **POST TRANSITION ISSUES**

Blade supports the concept of stations returning to their assigned NTSC channel for its DTV operation. Therefore, Blade urges the Commission to give preference to those stations who desire to return to their licensed NTSC channel that is within the core spectrum. Blade also urges that the Commission only authorize new DTV facilities for other existing NTSC operations at distances equal to or greater than the separations specified in Section 73.623(d).

## **Additional Comments Regarding WLIO Digital Coverage**

By: Frederick R. Vobbe, Chief Engineer  
WLIO Television – Lima Communications Corporation  
June 10, 1997

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Additional Comments Regarding WLIO Digital Coverage  
By: Frederick R. Vobbe, Chief Engineer  
WLIO Television - Lima Communications Corporation  
June 10, 1997

WLIO Television is a broadcast television station that has served West-Central Ohio since April 18, 1953. WLIO Television has viewers in many counties, including Allen, Auglaize, Defiance, Hancock, Hardin, Henry, Logan, Mercer, Paulding, Putnam, Shelby, Van Wert, Wood, and Wyandot counties in Ohio.

Under the presently adopted Federal Communications Commission plan for digital television, WLIO will be given Channel 20 with 50,000 watts. The plan also indicates the following assignments for stations around WLIO Television's service area.

WTVG in Toledo, Ohio will be given Channel 19. WTVG is approximately 78.2 miles from WLIO's transmitter to the north-northeast.

WKJG in Fort Wayne, Indiana will also be given Channel 19. WKJG is approximately 61 miles from WLIO's transmitter to the west-northwest.

WTJC in Springfield, Ohio will be given Channel 18. WTJC is approximately 62 miles from WLIO's transmitter to the south.

WLIO Television serves many viewers in distant counties through over the air reception, and reception by cable television companies in Ohio and Indiana. WLIO Television has concern that viewers in these Grade-B, or fringe areas, will not be permitted to continue to view WLIO Television due to interference.

The Federal Communications Commission, in a Memorandum and Order <sup>1</sup>, sought a modification of station ADI for the counties of Auglaize, Hancock, Hardin, Mercer, Putnam, and Van Wert, in Ohio. This was granted to WLIO Television based upon the viewers in those counties.

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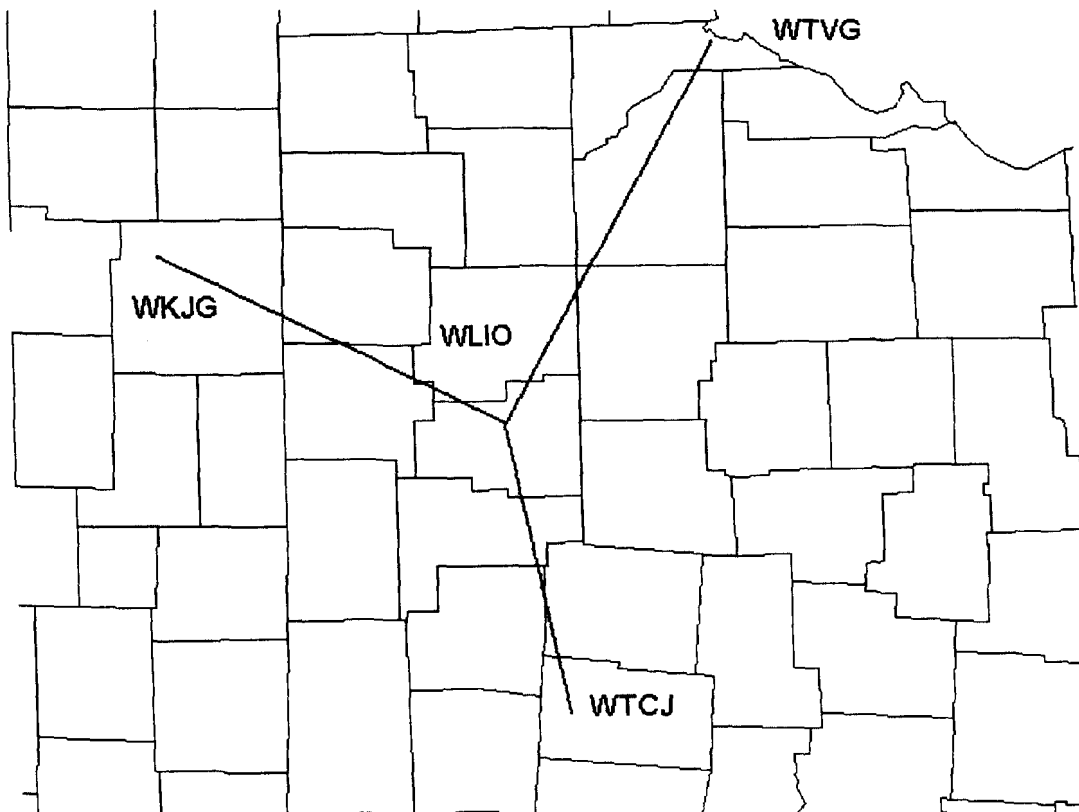
<sup>1</sup> - Before the Federal Communications Commission, DA93-1554, "Lima Communications Corporation (CSR-3825A) For Modification of Station WLIO-TV's ADI. Adopted December 8, 1993; Released January 18, 1994, by the Chief, Mass Media Bureau.

While it is hard to pin down specific viewer locations that watch WLIO Television over the air, we routinely received calls and comments from Defiance, Findlay, Upper Sandusky, Van Wert, and Paulding, which are communities outside our Grade A coverage, and in potential interference zones. Additionally, WLIO Television is viewed on many cable television systems.

In February 1991, WLIO Television's engineering department prepared a list of those systems that carried WLIO Television's programming. This list is attached as "Exhibit A".

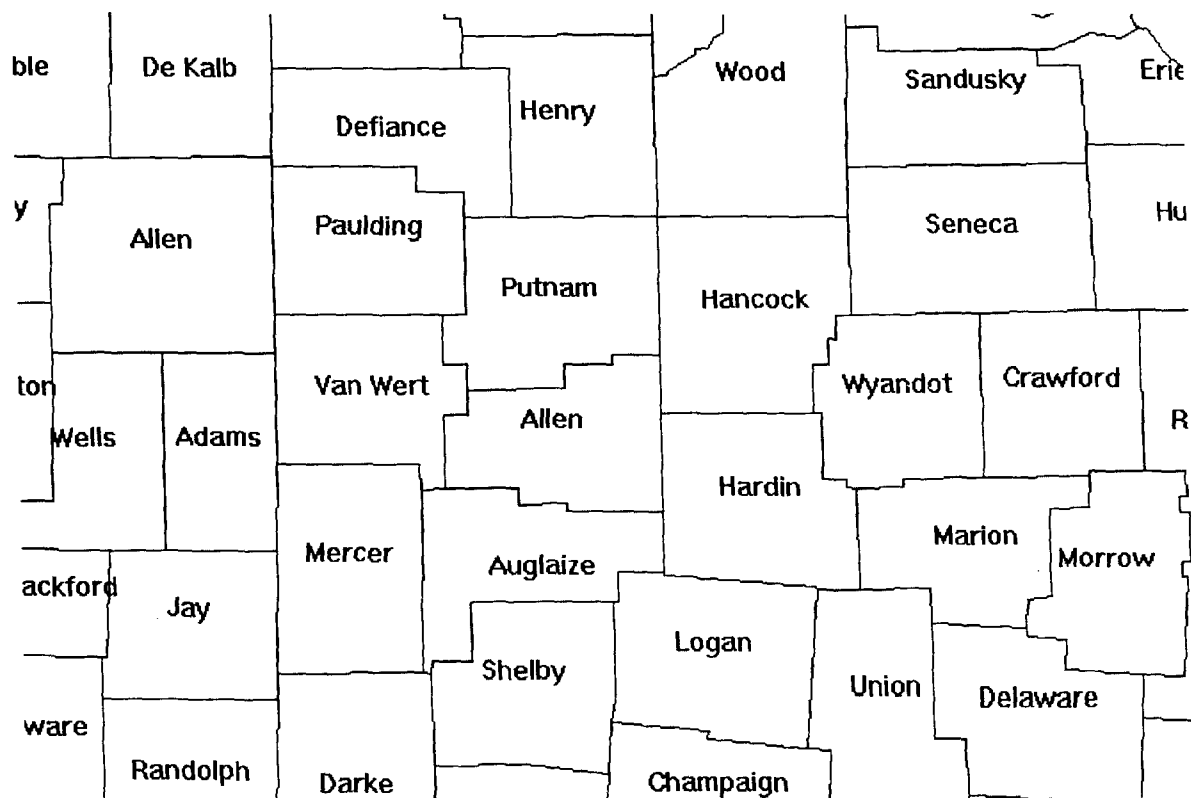
On June 26, 1996, the Nielsen Media Company produced a list of cable companies which carry WLIO Television. This list is attached as "Exhibit B".

On the map below, (and the description on page one), note the direction and distance from WLIO to stations WTVG, WKJG, and WTJC. At the halfway point on these vectors, it would be reasonable to assume that a proposed signal from WLIO Television would be the same as the signals from the proposed signals of WTVG, WKJG, and WTJC. WLIO Television contends that even though the stations are on an adjacent channel, there will be significant interference to WLIO Television's signal in the form of receiver front-end overload, which will cause a loss of WLIO to viewers.



Reference the map on the previous page for the halfway points, and the map below, and you will note the following.

1. Interference caused to WLIO Television from WTVG will fall over the counties of Hancock, (including the city of Findlay, Ohio, where WLIO has been granted must carry).
2. Interference from WKJG will fall over the counties of Paulding and Van Wert, Ohio.
3. Interference from WTJC will fall over Shelby and Logan County, and a portion of Auglaize County, Ohio.





WLIO Television has not been able to locate any data that proves that coverage with 50,000 watts on digital channel 20 will equal that of 661,000 watts on NTSC channel 35.

WLIO Television feels that the digital signal, (like that of digital data transmissions in other services), will be fragile in most reception points outside of our present NTSC Grade A coverage. Terrain changes, man-made noise, and normal building construction will cause significant problems with reception due to the low power levels. In addition, adjacent channel interference on channels 18, 19, 21, and 22, and multipath reception will decrease WLIO's service area.

WLIO Television feels that due to construction costs, some cable companies may decide not to carry WLIO. This would put the burden on the home viewers to come up with their own system for receiving WLIO.

WLIO feels that due to the average consumer products on the market for reception of signals in the UHF spectrum, and viewer knowledge of how to construct a proper antenna system, the reception of WLIO by home viewers could be compromised.

Therefore, Lima Communications Commission, licensee of WLIO Television, maintains that it would be necessary for a power increase to the maximum power limit to protect our coverage in the areas where WLIO Television has been viewed ever since April 18, 1953.



Bruce A. Opperman  
General Manager, Vice President,  
Lima Communications Corporation



Frederick R. Vobbe  
Chief Engineer, WLIO Television

FRV/